Attachment 4: Project Description STPUD Well Destruction Program

The goal of the proposed project is the proper destruction of three former municipal drinking water supply wells to protect and maintain the District's drinking water aquifer. The wells identified for destruction are as follows:

- 1. Al Tahoe Well No. 1
- 2. Country Club Well
- 3. Industrial Well No. 2

A brief description of each of these wells is provided below.

Al Tahoe Well No. 1

The Al Tahoe Well No. 1(State Well # 13N/18E-32P02 M) is located in a mixed Residential/Commercial neighborhood at 3101 Sacramento Avenue, South Lake Tahoe, CA. A former laundry service facility (Tahoe Linen Service) is located adjacent to the property. The Al Tahoe Well No. 1 was constructed in 1959 using a Cable Tool Rig to a total depth of 405 feet and was completed with a 10-foot clay sanitary seal. The top of the perforated interval occurs at a depth of approximately 55 feet extending to a depth of 200 feet. The second perforated interval extends from a depth of 305 feet to 405 feet. In 1982, a 12-inch casing liner and 8-inch well screen liner were installed in the well. The well screen liner extends from 171 to 369 feet. A grout plug forms the bottom of the well at 369 feet. In 1992, a high capacity production well (Al Tahoe Well No. 2) was constructed approximately 60 feet west, as a replacement well for the Al Tahoe Well No. 1. In 2000, the Al Tahoe Well No. 1 was disconnected from the District's water system and is currently used as an observation well. The well casing extends approximately 1-foot above ground surface and is enclosed within the former well house that is currently used for storage. This well has been selected for destruction to prevent contaminants from entering a deep semi-confined water-bearing zone used by the District as the main drinking water supply for the South Lake Tahoe Area.

Country Club Well

The Country Club Well (State Well # 12N/18E-20P01) is located in a Rural/Residential neighborhood at 1145 Country Club Drive, South Lake Tahoe, immediately adjacent to a public golf course (Lake Tahoe Golf Course) and park (Washoe Meadows State Park). Golf courses and parks are regarded as having a moderate risk of potential contaminating activities according to the state's Drinking Source Water Assessment Program. The Country Club Well was constructed in 1975. In 2003, low levels of MtBE were detected in groundwater produced from this well. Available well construction information indicates that the top of the perforated interval occurs at a depth of 114 feet. Within the well, an 8-inch wire-wrapped well screen liner extends from 117 to 187 feet. A grout plug forms the bottom of the well at a total depth of 197 feet. Although a Water Well Drillers Report for this well has never been found,

Attachment 4: Project Description STPUD Well Destruction Program

the well is believed to have been constructed with a 65-foot sanitary seal. In 2005, the well was disconnected from the District's water system and is currently used as an observation well.

The well casing extends approximately 1-foot above ground surface and is not enclosed. This well has been selected for destruction to prevent contaminants from entering a deep semi-confined water-bearing zone currently used by the District as the main drinking water supply for the Meyers Area.

Industrial Well No. 2

The Industrial Well No. 2 (State Well # 12N/18E-08G02 M) is located in a Commercial/Industrial neighborhood at 1104 Industrial Avenue, South Lake Tahoe, immediately adjacent to an operating asphalt plant (Tahoe Asphalt). Tahoe Asphalt is a listed Hazardous Materials Facility with a known history of groundwater contamination. Contaminants of concern identified in shallow groundwater underlying the plant include gasoline-range total petroleum hydrocarbons (TPH-g) and chlorinated hydrocarbons (1, 2-dichloroethane and tetrachloroethylene). The Industrial Well No. 2 was constructed in 1976 and has had a history of low levels of tetrachloroethylene (PCE) in groundwater produced from this well since 1989. Available well construction information indicates that the top of the perforated interval occurs at a depth of 40 feet. The perforated interval extends the total length of the well to a total depth of 190 feet. The well is believed to have been constructed using a Cable Tool Rig and was completed without a sanitary seal. In 2008, the well was disconnected from the District's water system and is currently used as an observation well. The well casing extends approximately 1.5-foot above ground surface and is not enclosed. This well has been selected for destruction to prevent contaminants from entering a deep confined water-bearing zone previously used by the District for drinking water supply in the South Y Area.

As this project does not result in obtaining information, a discussion of data, technical methods, and analysis is not relevant. However, Attachment 5: Work Plan does describe the technical details of the actual well destruction methods.

STPUD not only collaborates with other local public agencies with regard to the management of the affected groundwater basin, but serves as the lead agency in the Tahoe Sierra Integrated Regional Water Management Plan efforts. The Tahoe Sierra IRWM was originally adopted by the STPUD Board of Directors in 2006, and then on July 19, 2007 a revision of the plan was re-adopted. The Well Destruction Program proposed by STPUD is consistent with the IRWM plan, specifically Section C: Objectives, Groundwater Management (page 18) and Section D: Water Management Strategies, Groundwater Management (pages 23, 24). In addition to the regularly scheduled meeting outreach with stakeholders, federal and state agencies that are in partnership to implement the Tahoe Sierra IRWMP, STPUD has several other reliable outreach efforts planned. These include, but are not limited to;

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STPUD quarterly newsletters to customers, board meetings, website information (www.stpud.us), and local newspapers and other media.

There will be no ongoing use of products and there is no need for further funding once the proposed project has been completed.